### Chem 13.1

Goals: Determine how to balance chemical reactions, account for the different types of chemical reactions

#### Bellwork:

- 1) How do we calculate the mole?
- 2) Why is this skill important in chemistry?

#### Plan:

Go over bellwork, describe the relationship between moles and how much is made in a reaction

Examples: burning coal vs burning propane, how is one balanced and the other not?

Balancing steps and practice (see powerpoint)

- 1) Count the number of each element on both sides of the arrow
- 2) Note which ones have a different number on either side
- 3) Start by balancing one element at a time with a coefficient in front of the formula
- 4) Continue until all elements are equal on both sides of the equation

Guided practice with select equations

Individual practice, complete entirety for homework

## 13.2

Goals: classify different types of reactions and the patterns you see in each

Student will be able to identify the types of reactions seen in each type, predict the products of certain reactions if told the type of reaction it will be

## Plan:

Mini-lecture, reaction types and analogies to remember each

- Combination (coming together)
- Decomposition (breaking apart)
- > Single replacement
- > Double replacement
- Combustion

Practice: kahoot on reaction types and balancing

HW: Initial research to be done on topic for paper

## Chem 13.3

# Goals:

- Practice balancing and reaction types
- > Begin research on a chemical process as a topic explore the specific aspects of this topic